

# ORGANIC CHEMISTRY II LABORATORY

## CHEM 3145 Syllabus

### INSTRUCTOR CONTACT

**Lauren Johnson, MS**
**Office:** RBS 3005

**Phone:** 903-565-5508

**Email:**

laurenjohnson@uttyler.edu

**Office Hours:**

M 9:30—10:30 am

W 1:30—3:30 pm

**Breanne Mcelderry, MS**
**Office:** RBS 2013

**Email:**

bmcelderry@uttyler.edu

**Office Hours:**

M 1:30pm-3:30pm

W 3:30pm-4:30pm

R 11am-12pm

**Sarah McBride, BS**
**Office:** East end hallway of RBS, third floor.

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smcbride4@

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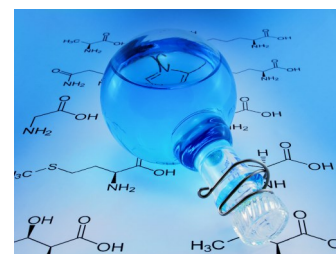
**Office Hours:**

M, W 11:00 am—12:30

PM

### Course Description

Continuation of CHEM 3143 including an introduction to the characterization of organic compounds using classical and spectroscopic methods.



### COURSE MEETING TIMES AND LOCATION

Section	Day/Time	Room	Instructor
001	Monday/ 1:00-5:00 PM	RBS 2015/4012	Johnson
002	Tuesday/ 1:30-5:30 PM	RBS 2015/4012	McBride Lee*
005	Wednesday/ 1:00-5:00 PM	RBS 2015/4012	McBride Butler*
007	Thursday/ 1:30-5:30 PM	RBS 2015/4012	McElderry
003	Tuesday/ 5:30-9:30 PM	RBS 2015/4012	McElderry
006	Wednesday/ 5:00-9:00 PM	RBS 2015/4012	McElderry

\*Indicates Instructor of Record

### PREREQUISITES AND COREQUISITES

Organic Chemistry 1 (CHEM 3342)

Organic Chemistry 1 Laboratory (CHEM 3143)

Organic Chemistry 2 (CHEM 3344), currently enrolled or previously completed

## Artificial Intelligence Statement

UT Tyler is committed to exploring and using artificial intelligence (AI) tools as appropriate for the discipline and task undertaken. We encourage discussing AI tools' ethical, societal, philosophical, and disciplinary implications. All uses of AI should be acknowledged as this aligns with our commitment to honor and integrity, as noted in UT Tyler's Honor Code. Faculty and students must not use protected information, data, or copyrighted materials when using any AI tool. Additionally, users should be aware that AI tools rely on predictive models to generate content that may appear correct but is sometimes shown to be incomplete, inaccurate, taken without attribution from other sources, and/or biased. Consequently, an AI tool should not be considered a substitute for traditional approaches to research. You are ultimately responsible for the quality and content of the information you submit. Misusing AI tools that violate the guidelines specified for this course (see below) is considered a breach of academic integrity. The student will be subject to disciplinary actions as outlined in UT Tyler's Academic Integrity Policy.

**For this course, AI is not permitted in this course at all. The work submitted by students in this course will be generated by themselves. This includes all process work, drafts, brainstorming artifacts, editing, and final products. This extends to group assignments where students must collaboratively create the project. Any instance of the following constitutes a violation of UT Tyler's Honor Code: a student has another person/entity do any portion of a graded assignment, which includes purchasing work from a company, hiring a person or company to complete an assignment or exam, using a previously submitted assignment and/or using AI tools (such as ChatGPT).**

## Student Academic Conduct

In this course, students are encouraged to study and to prepare for quizzes, exams and laboratory experiments with one another. ***However, when taking quizzes, exams or writing laboratory reports, students are to work alone. Students should turn in original work and those retaking this course may not turn in previously completed work from past semesters.***

***Cheating and/or plagiarism\* will not be tolerated.*** The University regulations are very explicit about academic misconduct, and these regulations will be fully enforced. ***During quizzes, a code of honor will apply under which students are to work alone and neither give help to others nor receive help from any sources.*** Students also are expected to help enforce this code. The minimum penalty for cheating will be a zero on the quiz or assignment in question. ***Maximum penalties, up to university expulsion, will be pursued in extreme or repeat cases.***

[\*plagiarism - The practice of taking someone else's work or ideas and passing them off as one's own. (This includes the instructor's PowerPoint presentations and any other material given out during the course).]

Students are encouraged to obtain a copy of *A Student Guide to Conduct and Discipline at UT Tyler*, available in the Office of Student Affairs.

# STUDENT LEARNING OUTCOMES

1. Better understand the principles and topics of organic chemistry which have been discussed in the lecture course.
2. Safely handle laboratory glassware, equipment, and chemical reagents using general guidelines and basic knowledge about the common hazards associated with operations performed in an organic chemistry laboratory.
3. Perform synthetic organic techniques as well as learn to use common equipment and apply methodologies found and used in the routine organic chemistry laboratory.
4. Demonstrate good laboratory technique, which is not only important to the student of chemistry, but also to the student of other professional fields that require skill and manual dexterity, such as: medicine, dentistry, pharmacy, biology, and physics.
5. Perform the laboratory skills needed to determine the chemical and physical properties of organic compounds.
6. Make careful and meaningful observations.
7. Interpret laboratory results and data correctly within inherent limitations on precisions and report findings in a scientific notebook using acceptable and appropriate notational and descriptive content that is in turn understandable and reproducible.
8. Demonstrate mental skills needed to assimilate and correctly interpret scientific data.
9. Write in such a manner that clearly presents scientific data (e.g. possessing the ability to reiterate meaningful observations and form logical conclusions based on experimental data).
10. Demonstrate *original* thought and the use of *logic* in the solution of problems.
11. Recognize and acquire attitudes that are characteristic of successful workers in scientific fields: initiative, originality, resourcefulness, accuracy, orderliness, open-mindedness, and the pride of achievement.
12. Use a variety of spectroscopic techniques as an aid to determine functional groups and molecular structure.

## Laboratory Attendance Policy

Attendance is **required** in the laboratory. **You cannot perform an experiment if you are not present!** Unexcused absences will result in a *grade of zero for any and all* work missed. Only students with **OFFICIAL** excused absences (see University Policies) will be allowed to receive a grade for work missed during the absence. It is the student's responsibility to see the instructor to make up any work missed during an absence.

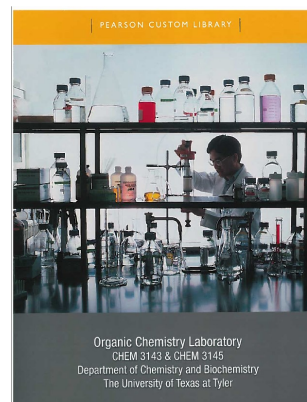
## Census Date and Last Day to Withdraw

Deadline for all registrations, schedule changes, and section changes is **Monday, January 27th**.

The last day to withdraw from one or more courses is **Monday, March 31st**.

## Required Materials

- 1. TEXTBOOK**     Organic Chemistry Laboratory  
                          Author: John W. Lehman  
                          ISBN: 978-1-323-35212-0
- 2. Laboratory Notebook with Carbonless Copies**
- 3. Indirectly Vented Safety Goggles**
- 4. Scientific Calculator**



## Recommended Materials

1. Laboratory apron or coat.



## CANVAS LEARNING SYSTEM

This course will be hosted on UT Tyler's Canvas server. You may access your Canvas account online at <http://www.uttyler.edu/canvas>

This site will contain a significant amount of information that will help you in this course.

**To log on to Canvas and to view this course, complete the following:**

- 1. Go to <http://www.uttyler.edu/canvas> or follow the "Canvas Log-in Link" at the top of the UT Tyler home page ([www.uttyler.edu](http://www.uttyler.edu)) under "UT Tyler Logins."**
- 2. Enter your "Username" and "Password". This will take you to your personal Canvas home page. You will see this page every time you "Login" to the Canvas server. This is NOT your course; this is just your Canvas home page.**
- 3. You will see all of the courses for which you are registered. If you are enrolled in a class that you should not be enrolled in, contact the instructor for that course. Note: not all instructors will use Canvas even if there is Canvas course for it.**
- 4. If you are having trouble with your Canvas account, please send an email to [itsupport@patriots.uttyler.edu](mailto:itsupport@patriots.uttyler.edu) or stop by the Campus Computing Center.**

## Experimental Preparation and Time-Efficiency

The laboratory experiments are planned and designed in a manner such that the student can easily complete the work during the assigned time. This can be accomplished only if the student has done a reasonable amount of study and preparation before coming to the laboratory. Efficiently using the time assigned for an experiment is a critical part of the course. As such, a student who consistently goes beyond the assigned laboratory time may be asked to stop working after the allocated time has expired and be assigned a grade for the portion of the experiment completed. Moreover, careful preparation and planning what you are going to do in each experiment before coming to lab will aid the student in avoiding serious mistakes.

## Laboratory Notebooks

Students are required to keep a laboratory notebook for this course. The notebook is to be a complete record of all experiments performed in the laboratory during this semester.

A lab notebook is perhaps one of the most valuable pieces of equipment a chemist can own. In addition to being a record of your work, it should allow anyone who studies it to duplicate your work. It also allows you to determine what happened in a previous experiment and figure out where an experiment went wrong. General notebook guidelines will be given the first day of lab.

## Grading Policy

We will be very careful and consistent in the grading of your reports and quizzes, however errors in grading are possible. Questions concerning the grading of a report, quiz or exam should be submitted to the professor of your lab section in writing *before* the next scheduled class meeting after the item was returned to you. Alternatively, you may see your professor during office hours (or any other time you find them available) with the suspect report or quiz in hand. All scores will be considered final one week after originally being returned to you.

## Safety in the Laboratory

### ***“Know Safety, No Injury – No Safety, Know Injury”***

The organic chemistry laboratory is potentially one of the most dangerous of the undergraduate laboratories. That is why you must have a set of safety guidelines (see handout). It is a very good idea to pay close attention to these rules. Disobeying safety rules can lead to **SERIOUS INJURY OR DEATH** of not only yourself, but others as well.

We will discuss relevant safety concerns before each laboratory experiment and will provide you with detailed safety information when necessary.

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## COURSE GRADE

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<b>Experimental:</b>	<b>75%</b>
<b>Quizzes:</b>	<b>10%</b>
<b>Exam:</b>	<b>15%</b>

### **Experimental (75% of Total Grade) will be based on**

#### **Lab Reports (5)**

1. Laboratory Notebook
2. Experimental Procedure (Quality of your Lab Technique)
3. Experimental Results (Quality of Your Results)
4. Preparation in Lab (Orderliness, Cleanliness, Overall Preparedness)

#### **Paper Labs (2)**

### **Quizzes and Exams (35% of Total Grade)**

There will be pre-lab quizzes that will be available on Canvas. These quizzes are due before the start of lab and will usually be available a week before that lab period. These quizzes will cover material that you should have read prior to lab and information covered in the pre-lab lecture PowerPoint (also available on Canvas).

There will be one cumulative exam at the end of the semester. This exam is vitally important in accessing your understanding of key concepts learned in the course and you should take it seriously. During this exam, the use of any online resources is considered cheating. This includes sites like Chegg, Reddit, Course Hero, etc. If any exam materials are found on these sites, all information will be collected and turned over to the Office of Judicial Affairs on campus.